

5. Environmental stewardship indicators

To further the core value of environmental stewardship, the Comprehensive Plan contains goals and policies for the ways the City can contribute to an improved natural environment. Because the environment does not stop at the city limits, being responsible for the environment means taking action to positively impact the regional, national and global environment.

The quality of our local environment is also closely connected with other Comprehensive Plan Core Values. These connections are reflected in the indicators that measure whether we are being good environmental stewards. Poor air and water quality and longer commute times may discourage companies from locating or staying in Seattle. They also make the city a less attractive place to potential workers, as well as a less healthful and enjoyable place for current residents.

Care for the environment today protects our future. The choices that the City and its citizens make have a direct effect on the environment. For example, use of motor vehicles is the leading contributor to local air and water pollution. We want future generations to enjoy the same quality of life that we do. The way we treat our natural resources may affect our children and future residents of Seattle even more than it affects us.

The indicators chosen to measure Environmental Stewardship are:

- Water quality
- Air quality
- Noise level
- Tree coverage
- Energy consumption
- Water use
- Recycling
- Commuting to work
- Transit ridership
- Alternative transportation facilities

Generally, the City's environment is showing some improvements. While water and air quality levels remain similar to past levels, noise pollution appears to be less of a concern to Seattle residents. Seattle's use of water and electricity per capita has dropped over the last few years. On the other hand, so has the rate of recycling. More residents are using means other than the car to get to work, and transit use is generally up. The City is providing expanded facilities for bicycles and high-occupancy vehicles such as buses.

Water quality: Water quality at beaches and streams appears to be improving.

Table 1: Water Quality for Swimming¹ at Lake Washington Beaches

	1998	1999	2001
Matthews Beach	Poor	Fair	Fair
Magnuson Park Offleash	Not Available	Not Available	Excellent
Magnuson Park	Excellent	Excellent	Excellent
Madison Park	Good	Excellent	Excellent
Madrona Park	Excellent	Excellent	Excellent
Mount Baker Beach	Good	Excellent	Excellent
Andrew's Bay Beach (Seward Park)	Excellent	Excellent	Excellent

Table 2: Shellfishability² at Marine Beaches

	1996-97	1999	2001
Carkeek	Poor	Poor	Poor
Golden Gardens	Poor	Fair	Fair
Shilshole Bay	Poor	Poor	Good
Magnolia Sites	Excellent to Fair	Fair	Very Good
West Point	Good	Good	Good
Elliott Bay	Poor	Very Good	Very Good
Alki Sites	Excellent to Poor	Fair to Poor	Very Good to Poor
Fauntleroy Cove	Poor	Poor	Poor
Lincoln Park	N/A	Excellent	Very Good

Table 3: Biological Integrity³ of Seattle's Streams

	1994	1996	1998	1999	2000	2001
Longfellow	N/A	Very Poor	Very Poor	Very Poor*	Poor	Very Poor
Venema	N/A	Poor*	Poor	Very Poor*	Poor	Poor
Taylor	Poor	Poor	Very Poor	Very Poor	Poor	Very Poor
Thorton South	Very Poor	Very Poor	Very Poor	Very Poor*	Very Poor	N/A
Thorton Main	N/A	Very Poor	Poor	Very Poor	Very Poor	Very Poor

¹ Measured by the presence of fecal coliform and e coli bacteria.

² Measured by the presence of fecal coliform bacteria.

³ Measured by using a Benthic Index of Biological Integrity. Biological integrity relates to the presence of organisms in the water and compares a regional baseline condition that reflects little or no human impact.

*Low insect numbers reduce the reliability of these numbers.

Water quality is important to Seattle. Jobs in marine-related industries, including fishing, depend on good water quality. Water activities, such as sailing and swimming provide recreation for Seattle residents and a reason for others to visit. Rivers, streams, and bays supply us with drinking water, fish and wildlife habitat and irrigation water. The listing of Chinook salmon as a federally endangered species has highlighted the importance of the quality of water in and around Seattle.

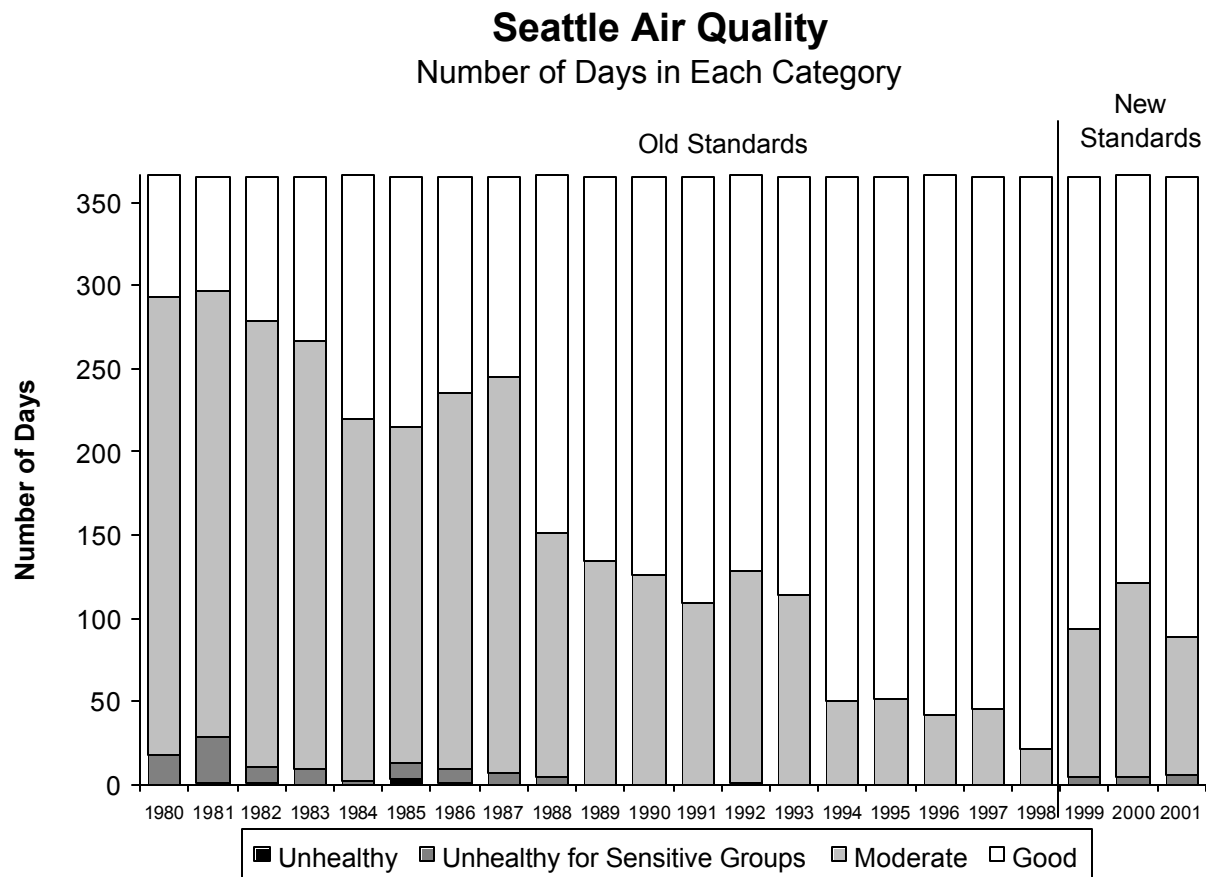
Growth in both households and jobs places increasing demand on our environment. A direct consequence of growth can be more polluted water such as when land development removes vegetation from stream banks leading to soil washing into streams.

The Comprehensive Plan's Environment Element's Goals EG6 through EG10 commit the City to improving environmental quality and reducing water pollution caused by motor vehicles. Rain can wash motor oil and other pollutants into our streams, lakes and bays from roadways, surface parking lots and other paved or developed areas. One strategy the Comprehensive Plan suggests is to try to increase the amount of plant cover and surfaces into which water can seep. By allowing water to seep into the ground, runoff from roads, rooftops and sidewalks decreases.

The City is actively working to improve water quality. Improving the quality of urban creeks, including Longfellow, Pipers, Thornton and Taylor Creeks became the goal of the Urban Creeks Legacy restoration and drainage improvement projects. These projects aim to preserve fish habitat and prevent floods that damage streamside properties by reducing the impact of heavy storm flows in the creek.

Other City projects include changing the landscaping techniques on City-managed property to eliminate the use of the most potentially hazardous herbicides and insecticides and to achieve a 30 percent reduction in pesticide use over 1999 levels. The City also promotes techniques for home gardeners to develop gardens that work with natural processes to grow healthy plants with minimal irrigation, fertilizer and pesticides.

Air Quality: After many years of improving air quality, Seattle had approximately 275 good air quality days in 2001.



The Puget Sound Clean Air Agency (PSCAA) monitors different kinds of pollutants in the Puget Sound area and Seattle. The graph above shows that the number of days with good air quality in Seattle grew from fewer than 315 in 1994 to almost 350 in 1998. There have been no “unhealthy” air quality days in Seattle since 1984. In 1999, a new set of federal standards was introduced. At least in part as a result of the changed standards, the number of good air quality days has since fallen to between 250 and 275.

PSCAA’s air quality monitors measure several pollutants in Seattle air, including lead, sulfur dioxide, carbon monoxide, and other particulate matter. According to a study by PSCAA, diesel soot accounted for 75% of air-pollution induced cancer risk from in Seattle. The State Department of Ecology has estimated that 57% of air pollution in the state is caused by car exhaust. Exhaust contains numerous toxic pollutants, including carbon monoxide and benzene. In summer months, car exhaust, other chemicals and higher temperatures react together to form ground-level ozone, commonly known as smog. Although the number of vehicle miles traveled through Seattle continues to increase, some progress has been made in reducing the chemicals from motor exhaust.

Poor air quality can be a significant problem for people, buildings and vegetation. Polluted air can cause health problems and damage to building materials. It affects trees and other living organisms. The U.S.

Forest Service and the National Park Service report that ozone has damaged trees, moss, and other vegetation in Mt. Rainier National Park, in Cascade forests, and in other natural areas. Emissions that harm local air quality can also contribute to global climate change. Automobile emissions are one of the greatest sources of greenhouse gases in our region.

The Comprehensive Plan's Environment Element contains a number of policies focused on improving the quality of Seattle's air and reducing greenhouse gas emissions. Some of the City's strategies for cleaner air and reduced greenhouse gas emissions are:

- supporting regional growth management activities that reduce reliance on cars (E11),
- promoting the use of motor vehicles with cleaner-burning alternative-fuel engines (E12), and
- identifying opportunities to eliminate the purchase of fossil-fuel burning sources of electricity (E14).

Goal TG2 of the Transportation Element of the Comprehensive Plan calls for action to reduce and/or mitigate air, water, and noise pollution from motor vehicles. Indicators of vehicle miles traveled, commuting to work, transit ridership and alternative transportation facilities also relate to how much we drive our cars. Many goals and policies in the Transportation Element relate to reducing the use of single-occupant cars and promoting other means of transportation. These range from encouraging the development of pedestrian and bicycle facilities to increasing transit ridership. The urban village strategy of the Comprehensive Plan aims to reduce the distance traveled between homes, jobs, services, and amenities. If this is successful, one result will be continued good air quality.

The City is undertaking a number of other activities aimed at improving air quality and reducing the emission of greenhouse gases resulting from City activities. Seattle City Light has committed to the long-term goal of meeting all of Seattle's electricity needs with zero net release of greenhouse gas emissions. The City is actively reducing emissions from the more than 4000 vehicles it owns: cars, trucks, backhoes, mowers, fork lifts, etc. Strategies include increasing the average fuel economy of the fleet, encouraging employees to use the bus or to carpool or teleconference instead of driving to business meetings and increasing the use of cleaner, alternative fuels. In addition, the City, along with several neighboring local jurisdictions and the Puget Sound Clean Air Agency, is taking aggressive steps to cut toxic emissions from its diesel fleet.

Noise level: between 1996 and 2001 the percentage of citizens who see noise as a major problem decreased.

	Noise as a major problem	Noise as a minor problem
1996	17%	43%
1997	13%	44%
1999	14%	44%
2001	15%	43%

Source: Citywide Residential Surveys

However, concern over noise has been slowly increasing since 1997. The perception that noise is a problem varies based on where survey respondents live. For instance, in 2001, residents in the central east section of the city were most likely to describe noise as a major problem. Residents of northwest Seattle were least likely to describe it as a problem.

Transportation—local street traffic, airplane traffic and freeway traffic—was the most common source of problem noise according to the 2001 survey. People, animals and stereos were other frequently mentioned sources of noise.

The perception of noise as a problem is relevant to several Comprehensive Plan goals. Increased traffic noise may accompany increased growth. The urban village strategy will result in people living more densely and closer to where they work, shop and play. That could lead to more people being exposed to higher levels of noise. Strategies in the Transportation Element, which seek to reduce the use of single-occupancy vehicles over time, complement the urban village strategy, and could reduce the number and noise of individual vehicles on residential streets in urban villages. The Transportation Element also contains a goal of reducing noise pollution from motor vehicles (Goal TG2).

The Transportation Element also seeks to “preserve and improve commercial transportation mobility and access” (TG21) and to “Maintain Seattle as the hub for regional goods movement and as a gateway to national and international suppliers and markets” (TG22.) Truck noise may be an unfortunate but real indicator of economic development and jobs. Airplane noise, too, may be the result of thriving commercial air transport or of tourism, which brings outside capital to Seattle hotels, restaurants, cultural venues, and retail establishments, along with jobs for Boeing employees.

Tree coverage: The number of street trees in Seattle has increased since 1992.

According to a report on trees in Seattle prepared by the Cascadia Consulting Group in 2000, Seattle has approximately 139,000 street trees, up from 90,000 in the last street tree inventory completed between 1990 and 1992. In addition, there are 115,000 park trees in or near landscaped areas, and at least another 250,000 to 400,000 trees on residential lots. In 2000, the city has approximately 6,800 acres (10.67 sq. mi.) of woodland canopy, of which nearly half is in the city's park system. These trees provide an average canopy cover of 25 percent for the entire city (including woodland areas) and 15.5 percent for the city's residential areas.

In late 1997, the City added goals and policies to the Comprehensive Plan regarding tree preservation and enhancement. Goals in the environment element include:

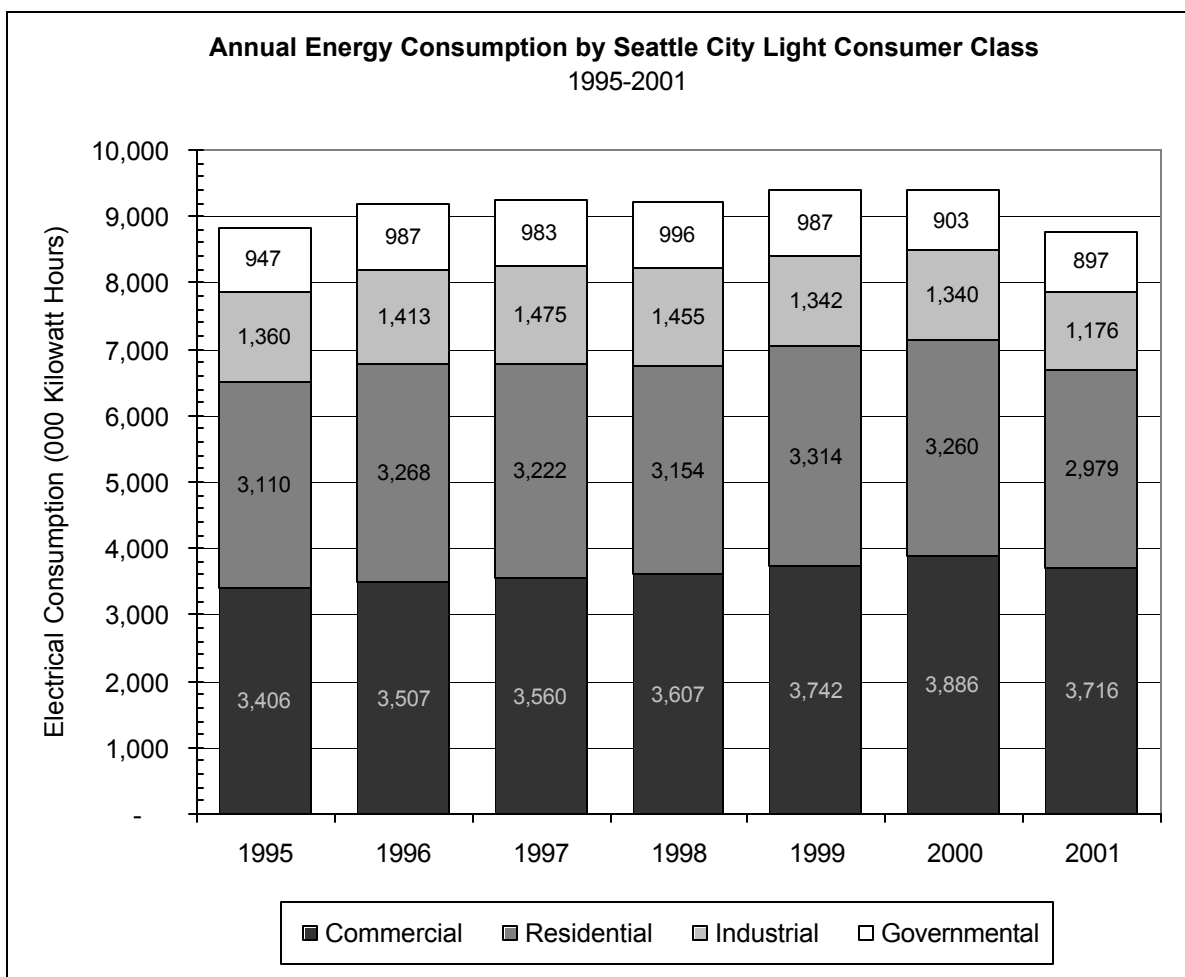
- “protecting the habitat of native and migratory wildlife by ... providing for the growth of native species of trees,”
- achieving a “net increase of healthy, diverse tree cover throughout the city,” and
- protecting trees of “significant historical, cultural, horticultural, environmental and aesthetic value” (EG17, 19, and 20).

The City has a number of programs in place that are intended to encourage the preservation of existing trees or to assist in the planting of new trees throughout Seattle. One program makes trees available to Seattle neighborhood groups. Neighborhoods can request trees from the Tree Fund for planting strips on residential streets or city parks.

In addition to planting new trees, the City protects existing exceptional trees. The Tree Protection Ordinance adopted in 2001, protects existing trees more than six inches in diameter from removal unless the tree is deemed hazardous or is being removed in conjunction with development. For new development, buildings may need to be designed, and some development standards modified, to avoid removing trees. Additional protection is given to trees more than two feet in diameter.

A Heritage Tree program identifies special trees. Trees are selected to be Heritage Trees based on criteria such as age, size, type, historical association, or horticultural value. When development occurs, the City seeks to retain existing large trees and has requirements for the planting of new trees.

Energy consumption: Use of energy by all types of consumers dropped in 2001.



Energy conservation is one way to serve more electricity customers without incurring the environmental and fiscal impacts of building new facilities to generate power. While some new source of electrical energy may be inevitably required, energy conservation that promotes more efficient use of existing sources can delay and reduce the total environmental impact of providing power.

Until 1990, residential customers in the Seattle City Light service area accounted for the largest amount of electricity used compared to commercial, governmental and industrial customers. Therefore, increased energy efficiency among residential customers could lead to significant energy savings for City Light. The amount of electricity used by residential customers decreased from a high of 12,900 kilowatt hours per customer in 1982 to 10,300 hours per customer in 2000.

The commercial customer class surpassed the residential class as the largest consumer of electricity in 1992. In this sector over the last five years, both the number of customers and the amount of energy consumed by the average customer have continued to grow. During the high-tech economic boom of the late 1990s and early 2000, high-tech and bio-technology business ventures grew tremendously, spurring greater demand for electricity to serve “wired” offices, laboratories, and concentrations of

computers and telecommunications equipment. Average annual consumption per commercial customer between 1995 and 2000 grew from 114,000 kilowatt hours to 126,000 kilowatt hours, a 10% increase.

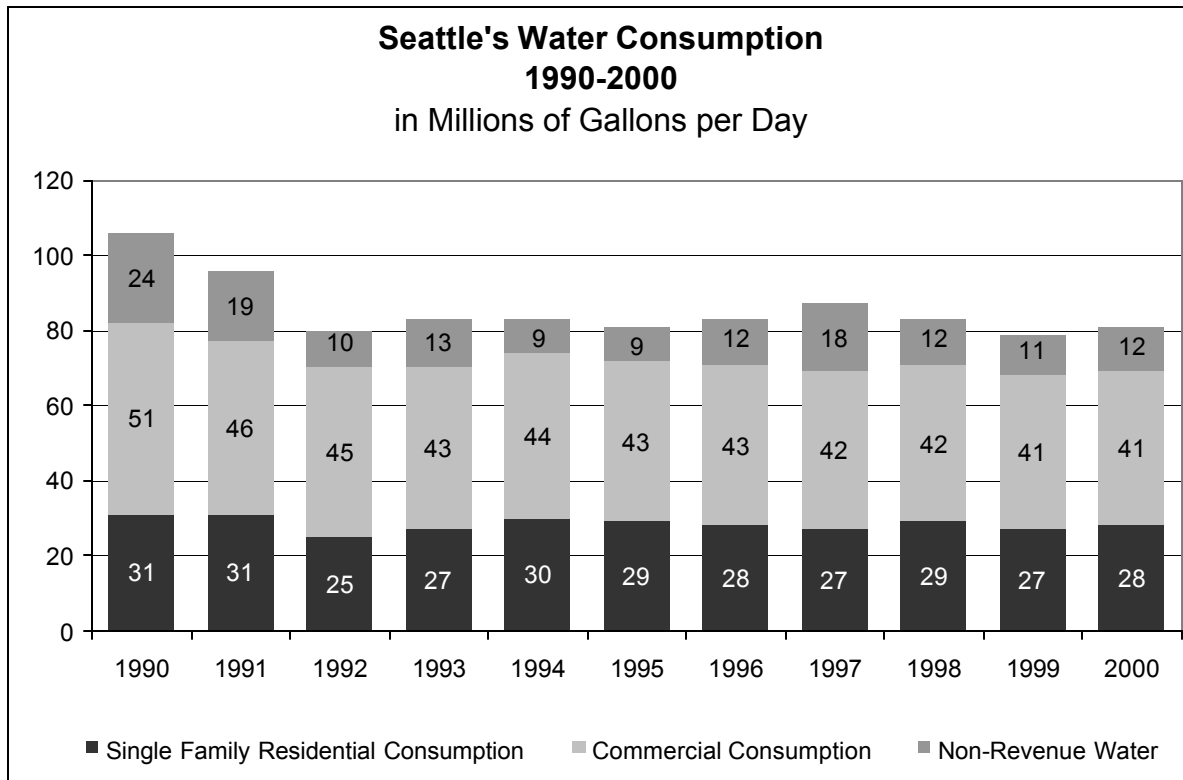
In 2001, with an energy crisis affecting the city, all customer classes conserved, with the greatest decrease in use by industrial customers. Energy demand in 2001 fell by seven percent overall.

One aspect of environmental stewardship is the efficient use of our resources. The Comprehensive Plan recognizes this in Goal UG3 of the Utilities Element, which states that the City will “maximize the efficient use of resources by utility customers.” Policies U7 through U9 of that Element recognize the need for environmental stewardship with resources such as electricity.

The City’s commitment to encouraging efficient use of resources also relates to economic opportunity and social equity. If utility bills are controlled through efficient use of energy, commercial customers will find Seattle an attractive place to do business. Residential customers, especially those at lower income levels, will spend a lower percentage of their income on electricity bills.

Seattle City Light has a number of programs that encourage energy conservation among each of its customer classes, including incentives for using energy-efficient lighting and equipment. The City is also committed to using sustainable building techniques in its own construction and encouraging the use of sustainable building techniques by others. These techniques can reduce the impacts of new construction on the environment, and can reduce the amount of energy consumed by a building over its lifespan.

Water use: water consumption has stayed constant between 1994 and 2000.



The graph above shows changes in water use since 1990. While Seattle's population grew by 5% between 1994 and 2000, water use has remained steady.

Seattle's biggest drop in water use occurred in the drought year of 1992, when water demand dropped 22%. Water use has remained nearly the same ever since. The following factors have led to this decrease in consumption:

- A rate structure that has higher rates in the summer peak season,
- Aggressive water conservation programs,
- New state plumbing codes for water fixtures, and
- Improvements in water facilities (i.e., lining leaky reservoirs, reducing unnecessary reservoir overflowing, main flushing, etc.).

Seattle's water consumption can be divided into three categories: single-family residential, commercial, and non-revenue water. Non-revenue water (water that is used by the utility or is lost through leaks in the system) has been cut by more than half during the past decade. The reduction in billed consumption has also been considerable. Residential and commercial customers have both cut their demand by more than 15%. As Seattle's population has been growing at the same time, the reduction in per capita terms is even greater. Per capita water use has dropped 25% over the last decade.

The Comprehensive Plan's Utility Element (UG3) commits the City to promoting efficient use of resources. The Land Use Element encourages growth to occur more densely in areas where utility infrastructure is already in place. This is a way of ensuring that water use will most efficiently serve the maximum number of people. Homes on small lots or multi-family buildings tend to use less water per household than homes with new landscaping and larger lots.

Seattle Public Utilities provides a number of programs that help to reduce water use by residents and businesses. For example, the City provides rebates to customers who buy low-water use clothes washers and toilets. All commercial water customers are eligible for free technical assistance to help improve operations and install new equipment. Rebates of up to 50% of qualified project costs are provided to businesses for water savings equipment or landscaping improvements designed to reduce water use. In addition, the City's focus on sustainable building introduces opportunities to reduce water use in new buildings.

Recycling: Seattle's recycling rate has declined since 1995.

In 2000, Seattle recycled 40% of its total waste. Single-family residents recycled 58% of their waste and businesses recycled 42%. The indicator shows a decline since 1995, when 44% of waste was recycled. Single-family residents have cut the amount of waste that they recycle by two percentage points. Businesses have reduced their recycling by six percentage points.

For solid and hazardous waste, reduction, reuse, and recycling control how much waste citizens and companies generate. Reduction is the decision not to buy a product or to buy it with the minimum of packaging. Reuse is the decision to use a product as many times as possible before buying more. Recycling is making sure some or all of a product is remanufactured into a new product.

Seattle has enjoyed an international reputation as a model for recycling programs. When the City's Solid Waste department surveyed Seattle residents in 1995 about their attitudes about recycling, 80% of the respondents said waste prevention was very or extremely important and that they would like to recycle even more. Waste prevention was at least somewhat important to 94% of respondents.

The Puget Sound region is experiencing growth, and growth begets garbage. Despite the growth, the tons of garbage generated in Seattle that are placed in landfills have declined from 503,000 tons in 1995 to 476,000 tons in 2000. This may indicate that residents and businesses in Seattle are finding ways to reduce and reuse their waste. As part of a growing region, the City has made a commitment to more efficient use of resources and the promotion of a more sustainable lifestyle. The Utilities Element of the City's Comprehensive Plan articulates this commitment through encouraging recycling and waste reduction.

Seattle Public Utilities provides recycling free to Seattle residents and those small businesses that generate small amounts of garbage. Commercial providers provide recycling services to larger businesses. Other City programs, such as "Use it Again, Seattle," provide opportunities for citizens to exchange unwanted items ensuring their reuse.

Commuting to work: Despite progress, the City is not meeting its goals for getting people out of their cars.

Means Seattle's Residents* Used to Commute to Work

	% of Workers Age 16 and Over			
	1990	2000	2000 Goal	2010 Goal
Alone in car, truck or van	58.7%	56.5%	51%	35%
Carpooling in car, truck, or van	11.8%	11.2%	12%	13%
Public transportation, including taxicabs	15.9%	17.6%	20%	27%
Walked	7.2%	7.4%	8%	10%
Bicycling and other means	2.5%	2.7%	5%	9%
Worked at home	3.8%	4.6%	4%	6%

Sources: U.S. Census Bureau, 1990 Census and Census 2000.

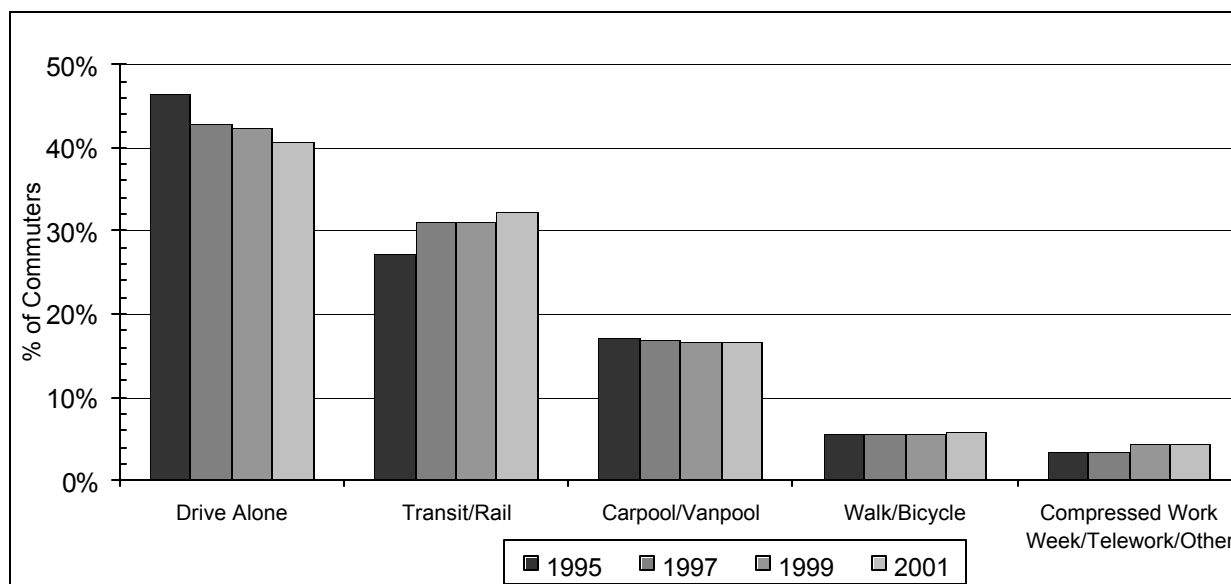
The Comprehensive Plan has a goal to “reduce the use of the car over time” (TG6). It seeks to shift commuters to public transit, walking, bicycling and other means of getting to work. U.S. Census Bureau data show that in 2000 a smaller share of Seattle residents drove alone or participated in carpools to commute to work than in 1990. The City’s goal of only 51% (policy T10) of workers driving alone to work, however, has not been met.

However, with increases in population, 14,000 additional residents drove alone to work in 2000. In order to meet the City’s 2000 goal, 17,600 workers would need to switch from driving alone to using another means of getting to work.

In 2000, 10,000 more Seattle residents took public transit to get to work than in 1990. In addition, 4,000 additional residents worked at home. There were slight increases in commute trips by bicycling and walking.

The average time residents of Seattle spent commuting to work increased by about two minutes between 1990 and 2000. By 2000, the average resident took almost 25 minutes to commute to work in the morning, up from 23 minutes a decade earlier. Part of this increase may be due to longer trips to work: 26% of Seattle residents now work outside the city, compared to 21% in 1990. Another part of the increase may be due to increased transit use. The commute trips of transit riders generally take longer than the trips of other commuters. A third cause of increased travel times may be increased congestion on streets and highways.

Means of Travel to Work of the Employees of Seattle's Major Employers



Source: King County Metro Commute Trip Reduction Data

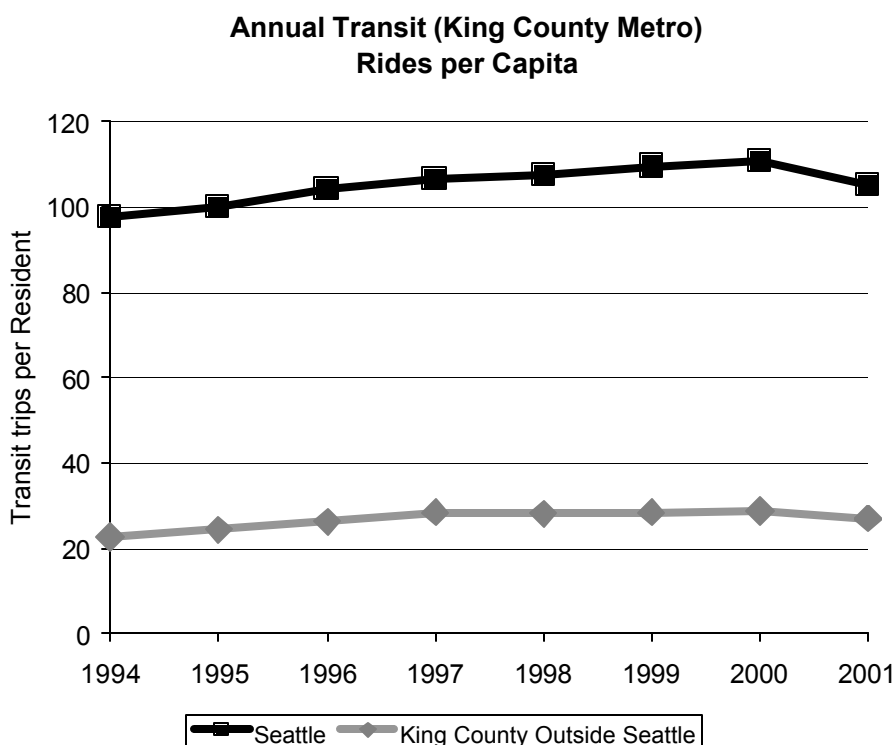
Employers in the city are involved in reducing the commute trips that their employees make. Over 270 employers in Seattle are involved in trip reduction programs that provide incentives for employees to find an alternative to driving to work in a single occupant vehicle. These incentives may include providing reserved parking spaces for carpools and vanpools, subsidizing transit fares, allowing employees to work a compressed work week schedule or telecommute, providing secured bicycle storage for bicyclists, or other encouragements.

Information from these employers presents additional information about how the commute to work is changing. Employers with commute trip reduction programs in place report decreases in the number of employees who drive alone or carpool. The number of employees who use public transit, walk, compress their work week so that they commute on fewer days or work from home increased from 52% to 59% between 1995 and 2001.

Transportation is the biggest source of air pollution overall. Driving to work alone pollutes the environment more than any other mode of transportation when measured on a per capita basis. If fewer people drove single-occupancy vehicles, there would be less air and water pollution. Another effect of using single-occupancy vehicles is roadway congestion. The 2001 citywide residential survey indicated that traffic is the most important problem for Seattle citizens.

“Way to Go, Seattle” is a City initiative to show people they can save money and make their communities more livable by making more conscious transportation choices, just as they do now with recycling and water conservation. Car Smart is a pilot program that offers a small number of households in Seattle an economic incentive to give up their “extra” car.

Transit ridership: A slight increase over 1994 ridership levels.



Transit ridership per capita has generally been increasing since 1994 for all of King County. Transit ridership per capita remains almost four times higher in Seattle than elsewhere in the county. Between 1994 and 2001, the annual number of trips taken by individual riders on Seattle bus routes increased approximately 13%, from 53 million to almost 60 million trips a year.

Transit ridership rises and falls depending on the level of transit service that is available, the cost of gasoline and the number of jobs in an area. Transit ridership probably fell in 2001 because of a decline in employment in the Seattle area in 2001.

In the citywide residential surveys, citizens have commented on whether it had become easier to get around by public transportation in the last several years. In 1996, 79% of the respondents said that it had improved or stayed the same. In 1997 and 1999, 83% of the respondents to the survey said that public transit had either improved or stayed the same. In 2001, the percentage of respondents stating that public transit had either improved or stayed the same dropped to 72%.

Goals TG4, TG5, TG6, and TG3 of the Transportation Element state that the City will encourage development of transportation alternatives to single occupancy vehicles, including transit. The use of less polluting alternatives to single-occupancy vehicles helps improve the environment, and the use of transit by Seattle residents can reduce vehicle congestion. Transportation Element Policy T10 includes goals for public transit work trips and non-work trips for Seattle residents.

Increased transit ridership is often associated with more dense concentrations of people, and transit service is more cost-effective if riders are concentrated in dense areas. The City's urban village strategy

encourages population and employment growth in already dense areas, which will help make transit more efficient to provide because of increased concentrations of potential riders and destinations.

Alternative transportation facilities: The City has expanded facilities for transit and other high-occupancy vehicles and bicycles.

Alternative Transportation Facilities in Seattle

	1996	2002
HOV or Transit-Only Lanes	35.8 miles	37.6 miles
Multi-Purpose Trails	28.1 miles	33.5 miles
Streets with Bike Lanes	15.1 miles	16.3 miles

In addition, the city has

- 2,000 miles of sidewalks and walkways,
- 463 public stairways, and
- an additional 75 miles of signed bike paths.

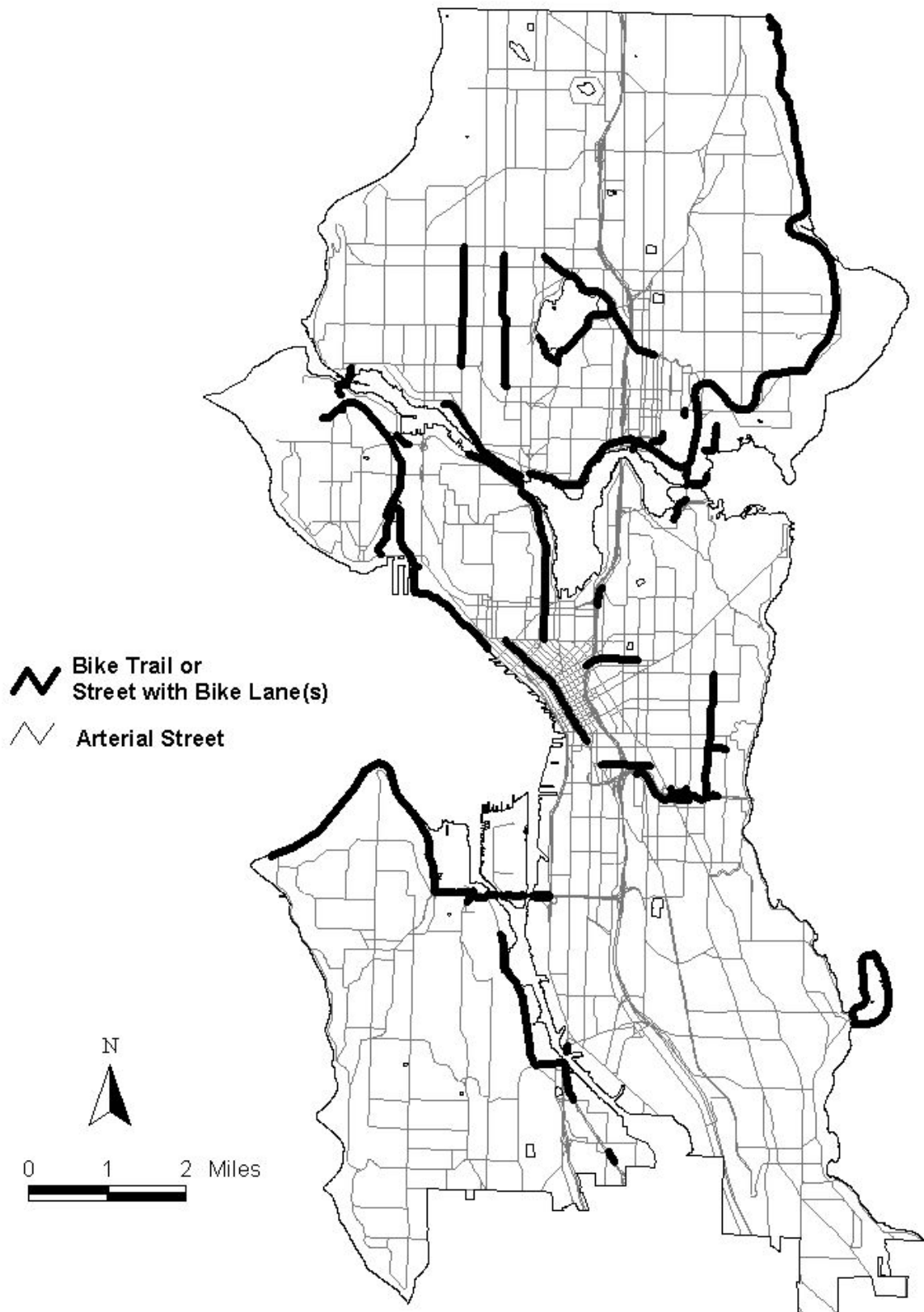
HOV lanes, which are reserved for carpools, vanpools, and public transit, include lanes on interstate freeways, state highways, and some lanes on city streets during rush hour. Transit only lanes include the bus tunnel, the E-3 busway and bus-only lanes on arterial streets and highways. Since 1994, transit-only or HOV lanes have been built along Aurora Avenue North, Howell Street downtown and the West Seattle Freeway

King County Metro, Sound Transit, Pierce Transit, and Community Transit provide most of the transit vehicles that run in the city. Since the adoption of the Comprehensive Plan, commuter rail has been added to the options residents of south King County and Pierce County have for commuting to work in Seattle. Future improvements include a light rail system and monorail through Seattle.

The urban trails network includes multi-use trails, bike lanes, bike routes, arterials with wide shoulders, and pedestrian paths. Since 1994, new trails, new bicycle lanes and new signed bicycle routes have been added in areas throughout the city, including in Ballard, Beacon Hill, Downtown Seattle, Greenwood, Crown Hill, Judkins Park/North Rainier, Rainier Beach, West Seattle and Fremont.

This measure generally tracks the supply of the facilities needed for residents and employees to travel through Seattle using transportation modes other than automobiles. However, the citywide residential surveys provide some data about whether or not these facilities are actually improving transportation choices. The surveys have asked the public about the ease of getting around Seattle by bicycle and on foot. Although these opinions necessarily include many subjective factors, public perception is one measure of the effectiveness of the City's investment in alternative transportation facilities. Perceptions of the ability to get around on foot and bicycle appear to have remained generally the same over the last five years, although fewer residents are noticing improvements in their ability to get around.

Bike Lanes and Trails



	Ability to get around on foot	Ability to get around by bicycle
1996 Citywide Residential Survey	66%: good or very good 25%: improved	(question not asked)
1997 Citywide Residential Survey	75%: good or very good 16%: improved	34%: improved
1999 Citywide Residential Survey	71%: good or very good 12%: improved	60%: good or very good 26%: improved
2001 Citywide Residential Survey	70%: good or very good 12%: improved	60%: good or very good 23%: improved

Goal TG5 of the Transportation Element states that the city will “provide a range of viable transportation alternatives, including transit, bicycling and walking.” These indicators also relate to Goals TG1, TG2, and TG3, which promote improved environmental quality and more energy-efficient, less polluting means of travel. Transportation Element Policy T10 sets goals for work trips and non-work trips by Seattle residents for different modes of transportation. These indicators are a way of measuring our success in achieving those goals.